

July 2015

Franklin County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

A total of 17 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Franklin County economy.¹ These 17 sectors have a total direct output of approximately \$261 million and support 1,299.9 jobs in Franklin County. Running the model for all 17 sectors simultaneously produces the following results:

Agriculture Contribution in Franklin County

				% of Gross		% of Gross		
		% of Total	Total	Regional		Regional		
Impact Type ²	Employment	Employment	Value Added ³	Product ⁴	Output ⁵	Product		
Direct Effect	1,299.9	10%	\$91,283,855	11%	\$260,861,125	32%		
Indirect Effect	203.8	2%	\$16,147,379	2%	\$27,494,731	3%		
Induced Effect	176.9	1%	\$11,446,254	1%	\$19,070,058	2%		
Total Effect	1,680.6	13%	\$118,877,488	14%	\$307,425,915	37%		

As shown in the above table, agriculture, food, and food processing supports 1,680.6 jobs, or 13% of the entire workforce in the county. These industries provide a total economic contribution of approximately \$307 million, roughly 37% of Gross Region Product (GRP). As noted below in the calculation of Gross Regional Product, imports and institutional sales are subtracted. Therefore, counties that import a relatively large amount of goods and services will have a reduced GRP which may lead to agricultural output being greater than GRP.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 17 agriculture, food, and food processing sectors is approximately \$119 million, or 14% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 14% of the total economy.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting: https://implan.com/index.php?option=com_content&view=category&id=19

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value Added = Labor Income + Indirect Business Taxes + Other Property Type Income

⁴ GRP = Final Demand of Households + Governments Expenditures + Capital + Exports - Imports - Institutional Sales

⁵ Output = Intermediate Inputs + Value Added

In the top ten by employment, Dairy cattle and milk production is the top employer in the agriculture industry with 371.4 employees. This table also shows the amount of jobs that are created by the agriculture industry in Franklin County.

Top 10 Industries Affected by Employment

	Total	Total
Sector Description:	Employment	Output
Dairy cattle and milk production	371.4	\$39,393,296
Beef cattle ranching and farming, including feedlots and dual-purpose ranching		
and farming	294.3	\$43,433,713
All other crop farming	169.2	\$12,229,520
Farm machinery and equipment manufacturing	167.8	\$104,627,009
Grain farming	79.5	\$15,861,692
Animal production, except cattle and poultry and eggs	54.4	\$3,136,947
Landscape and horticultural services	53.9	\$3,182,888
Wholesale trade	48.2	\$10,938,041
Veterinary services	47.5	\$3,104,037
Oilseed farming	20.9	\$25,804,528

The Farm machinery and equipment manufacturing industry directly contributes approximately \$105 million to Franklin County's economy. This table also shows how much revenue is generated in other industries by having a strong agriculture industry.

Top 10 Industries Affected by Output

	Total	Total
Sector Description:	Employment	Output
Farm machinery and equipment manufacturing	167.8	\$104,627,009
Beef cattle ranching and farming, including feedlots and dual-purpose ranching		
and farming	294.3	\$43,433,713
Dairy cattle and milk production	371.4	\$39,393,296
Oilseed farming	20.9	\$25,804,528
Grain farming	79.5	\$15,861,692
All other crop farming	169.2	\$12,229,520
Wholesale trade	48.2	\$10,938,041
Meat processed from carcasses	16.0	\$7,431,141
Owner-occupied dwellings	0.0	\$4,968,629
Landscape and horticultural services	53.9	\$3,182,888

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture sector and the output they contributed to Franklin County's economy.

Sector Description:	Employment	Output
Oilseed farming	20.9	\$25,804,528
Grain farming	79.5	\$15,861,692
Vegetable and melon farming		\$56,807
Tree nut farming		\$23,799
Greenhouse, nursery, and floriculture production	10.2	\$1,024,785
All other crop farming	169.2	\$12,229,520
Beef cattle ranching and farming, including feedlots and dual-purpose ranching		" ,
and farming	294.3	\$43,433,713
Dairy cattle and milk production	371.4	\$39,393,296
Poultry and egg production	0.7	\$199,747
Animal production, except cattle and poultry and eggs	54.4	\$3,136,947
Commercial logging		\$81,229
Meat processed from carcasses		\$7,431,141
Bread and bakery product, except frozen, manufacturing		\$1,164,609
Frozen cakes and other pastries manufacturing		\$105,379
Farm machinery and equipment manufacturing		\$104,627,009
Veterinary services	47.5	\$3,104,037
Landscape and horticultural services		\$3,182,888

All 105 counties in Kansas have IMPLAN models with an agriculture contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Kansas, the retail sector was omitted.